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Relationship between patient safety culture and patient experience in hospital settings: a scoping review protocol

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ABSTRACT

Introduction Hospitals commonly examine patient safety culture and other quality indicators to evaluate and improve performance in relation to quality and safety. A growing body of research has separately examined relationships between patient safety culture and patient experience on clinical outcomes and other quality indicators. However, there is a knowledge gap regarding the relationship between these two important domains. This article describes the protocol for a scoping review of published literature examining the relationship between patient safety culture and patient experience in hospital settings. The scoping review will provide an overview of research into the relationship between patient safety culture and patient experience in hospital contexts, map key concepts underpinning these domains and identify research gaps for further study.

Methods and analysis The scoping review will be conducted using the five stages of Arksey and O'Malley's framework: identify the research question; identify relevant studies; study selection; chart data; and collate, summarise and report the results. The inclusion criteria will be applied using the Population, Concept and Context Framework. Searches will be conducted in the CINAHL, Cochrane Library, ProQuest, MEDLINE, PsycINFO, Scopus and SciELO databases, without applying date range limits. Hand-searching of grey literature will also be performed to find relevant, non-indexed literature. Data will be extracted using a standardised data extraction form developed by the Joanna Briggs Institute. Both descriptive and thematic analyses will be undertaken to scope key concepts within the body of reviewed literature.

Ethics and dissemination This type of study does not require an ethics review. The results will be submitted for publication in a peer-reviewed journal and presented at conferences.

INTRODUCTION

Enhancing the quality of hospital services by improving patient safety culture is an increasing focus of practical action and research interest in health systems.[1 2] The quality of health services can be improved through embedding a safe and reliable culture, supported by managers who understand its influence on organisational performance,

Strengths and limitations of this study

► The study will examine the relationship between patient experience and patient safety culture in accordance with recent refinements to Arksey and O'Malley's framework for scoping reviews.
► It will explore the ways in which these domains have been conceptualised and methodologically measured or described and will map theoretical links between key concepts.
► A comprehensive search strategy will be applied, involving six bibliographical databases, without limits on study design or publication date.
► Studies not in English or Arabic languages will be excluded; this could result in relevant resources not being captured.

including clinical outcomes.[3 4] However, there is limited literature investigating the interaction between patient safety culture and patient experience, unlike the extensive research on these concepts individually.

Patient safety culture has been defined as the shared beliefs, attitudes, values and norms, which influence the behaviours and attitudes of employees, with respect to patient safety.[5] Weaver *et al*[6] assert that the terms 'safety culture' and 'safety climate' are frequently employed in an interchangeable manner despite their different meanings. For instance, patient safety culture represents a component of organisational culture[7] that is related to the consonance of behavioural patterns, beliefs and values related to the safety of patients, which are common among representatives of a particular entity,[8–11] and empowers decision-making.[12] Safety climate, conversely, is considered as the outer layers of safety culture,[13] more often measured at a defined time point.[6] From this perspective, patient safety culture is the deeper/inner shared perceptions and developed over time,

while safety climate refers to a snapshot of the shared perceptions (surface perceptions).

Patient experience has been defined as patient 'perceptions of phenomena for which they are the best or only sources of information, such as personal comfort or effectiveness of discharge planning' (Hagerty*et al*,[14] p1). Patient experience requires patient involvement (especially patients with long-term conditions) in reporting their own experiences, including their perspectives of staff–patient communication, availability of information, their involvement in decision-making[15] and their own safety.[16]

The concept of patient experience usually appears in studies focused on designing and enhancing health services based on patient feedback. In this context, the collection, analysis and application of patient experience data is widely considered a reliable approach for providing patient-centred health services.[17] Providing patient-centred care, informed by patient experience, requires a cultural change from traditional approaches in which patients are viewed as passive recipients of care to more recent approaches that conceive of patients as partners in their care.[18]

In the literature, the terms 'patient satisfaction' and 'patient experience', which can mean quite different things, have sometimes been used interchangeably.[19] While patient experience records, from a patient's perspective, what actually happened to the patient in a healthcare setting, patient satisfaction records whether the patient's experience met his or her expectations. Differences in patient satisfaction ratings for the same patient experience can reflect differences in individual's expectations.[20]

AIM AND OBJECTIVES

There has been much effort internationally to improve patient safety, but serious incidents continue to occur in hospital settings. This makes it important to consider patients' experiences of patient safety culture in hospitals and how safety has been conceptualised by healthcare workers.

The objective of this protocol is to: articulate the design of a scoping review aiming to explore and synthesise existing research literature regarding patients' experiences of patient safety culture in hospital settings; map the multiple perspectives and key concepts underpinning the research area; and identify research gaps. The results of this review will offer information for health organisations, researchers, healthcare professionals, policy and decision-makers, and patient groups.

METHOD

A scoping review is defined as an approach that 'aim[s] to map rapidly the key concepts underpinning a research area and the main sources and types of evidence available, and can be undertaken as stand-alone projects in

their own right, especially where an area is complex or has not been reviewed comprehensively before' (Mays *et al*,[21] p194). In 2005, Arksey and O'Malley built on this definition and provided a methodological framework that researchers can apply to their topic.[22] This study will follow the five stage framework of Arksey and O'Malley for a scoping review,[22] which was refined by the Joanna Briggs Institute[23]:

► Stage 1: identify the research question.
► Stage 2: identify relevant studies.
► Stage 3: study selection.
► Stage 4: chart data.
► Stage 5: collate, summarise and report the results.

The study will also follow the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (online supplemental appendix 1).[24]

PATIENT AND PUBLIC INVOLVEMENT

No patient is involved in this study.

Stage 1: identify the research question

Research questions developed initially for scoping reviews are commonly refined during the process of iterative development prior to finalisation. The research question for this study is: *"What is known regarding the relationship between patient safety culture and patient experience in hospital settings?"*

Stage 2: identify relevant studies

Search terms and eligibility criteria

The inclusion criteria for the scoping review will follow the Population, Concept and Context (PCC) framework recommended by the Joanna Briggs Institute for this type of study.[23] The PCC framework will be used instead of the more traditional Population, Intervention, Comparison and Outcome model, usually used for systematic reviews, because the research question does not focus on aggregating and determining the strength of evidence supporting a specific intervention.

The inclusion and exclusion criteria based on the PCC framework

Inclusion criteria
  Population
► Healthcare providers in hospital contexts, including management, clinical and non-clinical staff.
► Patients who have received healthcare services in hospital settings, irrespective of demographic characteristics.
  Concept
► Any article that focuses on patient safety culture, safety climate or organisational culture, in addition to patient experience or patient satisfaction.
  Context
► Hospital setting.
  Exclusion criteria
► Studies not reported in English or Arabic languages.

Search plan

The electronic database search will be guided by the Boolean operators 'AND' and 'OR' to refine search strategies. Each search result gleaned from the included studies will be documented and stored in Endnote V.x9 (Clarivate Analytics), and then duplicates will be deleted. The following keywords will be used to construct the search strategies: ("safety culture" OR "patient safety culture" OR "safety climate" AND "patient experience" OR "patient satisfaction" OR "patient experience measure" OR "patient satisfaction measures" OR "quality indicators" OR "Quality Indicators, Health Care" AND "healthcare" OR "hospital" OR "Hospitals"). Online supplemental appendix 2 presents the developed search strategy in one of the selected databases (the Cochrane Library).

The review will use the three-step search phases proposed by the Joanna Briggs Institute.[23] In the first phase, an initial search in two electronic databases (CINAHL and MEDLINE) appropriate to the research title will be conducted. The first search will be followed by screening the titles and abstracts of identified articles, and of the index terms used to describe the papers.

In the second phase, an additional search using all retrieved search and index terms will be undertaken across all included databases (CINAHL, Cochrane Library, ProQuest, MEDLINE, PsycINFO, Scopus and SciELO). Then, the titles and abstracts of articles for inclusion will be screened, followed by screening of the full text of potentially relevant studies to determine the final inclusion.

In the third phase, the reference lists of the final included studies will be screened for additional studies of relevance. Targeted searches for grey literature will be conducted via online hand-searching in the websites of relevant organisations in Australia and internationally, such the Agency for Healthcare Research and Quality, the Australian Commission for Safety and Quality in Healthcare, the Agency for Clinical Innovation, National Institutes of Health and Google Scholar.

Stage 3: study selection

The study selection stage will be conducted in two phases. The first phase involves the review of titles and abstracts. One reviewer (AA) will evaluate all titles and abstracts to determine whether each paper meets the eligibility criteria. Studies will be categorised as 'included', 'excluded' or 'not sure'.

Any references screened as included and not sure in the first phase will be considered for full-text review. Three reviewers (SH, DD and RH) will each screen a random sample of 10% of titles and abstracts of studies screened as included, excluded or not sure against the selection criteria. If differences arise, all reviewers will consult to reach consensus.

Stage 4: chart data

A data extraction table will be developed to compile the data extracted during the scoping review. Online supplemental appendix 3 (attached as a separate file) contains an example of the extraction form that will be used in the study. One reviewer (AA) will extract the data from the included studies. The accuracy of the data extraction exercise will be verified by three reviewers (SH, DD and RH). Any discrepancies will be discussed during the group meetings until all the reviewers agree as to what data should be included or excluded.

Classification of data extraction:
► Author/s.
► Country.
► Aims/objective(s).
► Methodology/methods.
► Inclusion/exclusion criteria (eg, PCC).
► Types of intervention (if applicable).
► Measurement of outcomes (if applicable).
► Key results that relate to the review question.

Stage 5: collate, summarise and report the results

The methods that will be used during the research process will allow the investigators to synthesise existing literature that address this diverse field of research and develop a summary report that contains the following:
► A descriptive analysis will map the existing data and present the data distribution of studies in accordance with the date of publication and country of origin.
► A content analysis will present an outline of the theoretical and methodological strategies of the studies, and a thematic analysis will identify any prominent themes that emerge in relation to the research question and aims. The content of the included studies will be mapped broadly into three key categories:
A. Theoretical conceptualisations of patient safety culture and patient experience.
B. Measuring patient safety culture and patient experience.
C. Relationship between patient safety culture and patient experience.

ETHICS AND DISSEMINATION

The scoping review results will provide an overview of the relationship between patient safety culture and patient experience in the hospital context, and highlight areas where evidence is controversial or missing to identify priorities for further study. It does not require ethical approval as it will synthesise information that is already available from published research. The review results will be submitted to a peer-reviewed journal for publication and presented at relevant conferences.

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